

Claims

1. A pressure container for receiving viscous substances, having an outlet valve (14) which can be displaced between a closed position and an open position, wherein a movable valve element (18, 30) can be moved in the direction toward the interior of the container for unblocking an opening cross section, characterized in that at least two opening cross sections are provided wherein, by means of actuating the valve (14), initially a first opening cross section can be unblocked, and thereafter at least one further opening cross section.

2. The pressure container in accordance with claim 1, characterized in that the first opening cross section which is first unblocked when the valve (14) is actuated is smaller than the at least one further opening cross section.

3. The pressure container in accordance with claim 1 or 2, characterized in that with the valve (14) open, at least one opening cross section has the shape of an angular gap.

4. The pressure container in accordance with one of claims 1 to 3, characterized in that the first opening cross section is defined by a first sealing element (32) and a first closing element (30), and the second opening cross section by a further sealing element (44) and a further closing element (34).

5. The pressure container in accordance with claim 3, characterized in that the closing element (30, 34) which, for unblocking the opening cross section can be moved relative to the annularly embodied sealing element (32, 44), can be lifted off essentially axially in relation to the sealing element (32, 44) in the area of at least one opening cross section.

6. The pressure container in accordance with claim 5, characterized in that the sealing element (32, 44) has a cross-sectional shape with a flat annular contact face or a defined sealing contour regarding the associated closing element (30, 34).

7. The pressure container in accordance with one of claims 3 to 6, characterized in that the opening cross sections are arranged concentrically in respect to each other.

8. The pressure container in accordance with one of the preceding claims, characterized in that the closing element (30) of the first opening cross section is arranged on the end of the movable valve element (18) facing the inside of the container.

9. The pressure container in accordance with one of the preceding claims, characterized in that the sealing element (32) of the first opening cross section is arranged on the closing element (34) of the second opening cross section.

10. The pressure container in accordance with one of the preceding claims, characterized in that an engaging piece (46) is provided on the valve element (18), which moves along the second closing element (34) for unblocking the second opening cross section after the first opening cross section has been unblocked.

11. The pressure container in accordance with claim 10, characterized in that the engaging piece is embodied to be star-shaped and has three or more arms, and the second closing element (34) has a central opening.

12. The pressure container in accordance with claim 11, characterized in that the second closing element (34) is embodied as a disk-shaped, cone-shaped or plate-shaped ring,

wherein the first sealing element (32) is arranged around the central opening on the side of the closing element (34) facing the inside of the container (10).

13. The pressure container in accordance with claim 12, characterized in that a guide device is provided, which axially guides the second closing element (34) and/or secures it against tilting.

14. The pressure container in accordance with one of the preceding claims, characterized in that the valve element (18) is embodied to be hollow and constitutes the outlet opening for the substance stored in the container (10).

15. The pressure container in accordance with one of the preceding claims, characterized in that the valve element (18) is movably guided in a valve housing (16), which is connected in a pressure-tight manner with a housing (12) of the pressure container (10).

16. The pressure container in accordance with claim 15, characterized in that a restoring spring (20) prestresses the valve element (18) in the direction of a closed position.

17. The pressure container in accordance with one of the preceding claims, characterized in that an actuating element (48) is provided, which is connected via a gearing (50, 52) with the movable valve element (18).

18. The pressure container in accordance with claim 17, characterized in that the actuating element is embodied as a lever (48), which is connected with the valve element (18) and the valve housing (16) by means of hinge points (50, 52).

19. The pressure container in accordance with one of claims 1 to 16, characterized in that the valve element is

rotatably seated in the valve housing by means of a screw thread, and that possibly a torsion spring is provided as the restoring spring.

20. The pressure container in accordance with one of claims 15 to 19, characterized in that the valve housing (16) is made of plastic and that a hold-down device is provided for the pressure-tight connection with the container (10) and is crimped around an annular flange of the valve housing (16) and an upper end of the container (12).

21. The pressure container in accordance with claim 20, characterized in that a seal ring is provided between the upper end of the container (10) and the underside of the annular flange.

22. The pressure container in accordance with claim 21, characterized in that the seal ring is embodied as an annular disk which, in the initial state prior to fastening on the container (10), protrudes radially past the annular flange of the valve housing.